OhioEPA
State of Ohio Environmental Protection Agency
Northeast District Office

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Bob Taft, Governor
Christopher Jones, Director

November 5, 2002

RE: OHIO EPA COMMENTS ON THE RI/FS WORK PLAN, FIELD SAMPLING PLAN, QUALITY ASSURANCE PROJECT PLAN, AND HEALTH AND SAFETY PLAN, CHEMICAL RECOVERY SYSTEMS, INC., ELYRIA, OHIO

Ms. Gwendolyn Massenburg
Remedial Project Manager
U.S. EPA Region 5
77 West Jackson Blvd., Mailcode SR-6J
Chicago, IL 60604-3590

Dear Ms. Massenburg:

Enclosed are the Ohio Environmental Protection Agency's (Ohio EPA) comments on the draft Remedial Investigation/Feasibility Study (RI/FS) for the Chemical Recovery Systems (CRS) site in Elyria, Ohio. Specifically, comments below address the RI/FS Work Plan, Field Sampling Plan (FSP), Health and Safety Plan (HASP), and the Quality Assurance Project Plan (QAPP) for the project. These documents were received on August 27, 2002.

A notice of deficiency was sent to the CRS Site Group by the United States Environmental Protection Agency (EPA) regarding the original site QAPP. The document required a revision that was consistent with current EPA guidance documents for QAPP deliverables, in accordance with Section VIII of the Administrative Order on Consent (AOC). The revised QAPP was submitted and received by Ohio EPA on October 10, 2002.

No comments have been included or will be given concerning the submitted site HASP. Although I have reviewed this document, it is our remedial policy not to approve/disapprove this document. It is the contractor's responsibility to ensure the health and safety of its workers and to control off-site releases by safe work practices.

WORK PLAN

1. Section 2.4.1 [U.S.EPA FIT Assessment Results (1981-1982)], first sentence.] It was Ohio EPA, Northeast District Office (NEDO), which alleged releases from the site were impacting the east branch of the Black River. It is reported in the Work Plan as the Northwest District Office (NWDO) of Ohio EPA.

2. Ohio EPA generally agrees with the approach (judgmental sampling) taken by the consultant regarding the soil sampling numbers and locations specified in the description methodology on page 23 of 43 of Section 4.2.1.4 (Overview of Field Activities-Soil Sampling). This approach appears to be consistent with EPA policy regarding what is known about historical activities and locations at the site, but a single sample proposed for each area of historical site activity appears to be low in certain areas. Specifically, former drum storage area # 1, former drum storage area # 2, and former drum storage area # 4. The proposed soil sampling in these areas would be sufficient for determining the presence or absence of site related constituents, but likely insufficient for the determination of the nature and extent of

contamination in those areas, which is the main objective of the RI/FS. Ohio EPA also believes it would be prudent to evaluate soils in one (1) or two (2) locations in the former above-ground storage tank area, and former Brighten Still building in the northwest corner of the site.

3. With respect to Section 6.0 (**SCHEDULE**), Figure 6-1, it will be important to allow sufficient time for newly installed monitoring wells to equilibrate prior to any sampling. The effects of drilling, sealing, and development of monitoring wells can bias observations of water chemistry until the subsurface environment sufficiently equilibrates. This time can vary depending on site conditions and drilling methods employed, but typically a period of a few weeks is needed for stabilization, prior sample collection and analysis.

FIELD SAMPLING PLAN

1. With respect to **Section 2.1 (Sampling Program),** Ohio EPA would like to see the details for the two (2) monitoring wells located on Locust Street, which were installed by Englehard Corporation. Information such as casing type and diameter, screen type and length, date of installation, and total well depth would be most useful.

2. Regarding **Section 3.4.2 (Monitoring Well Construction)**, it is stated within this section that a soil sample will be collected at each well location in the zone of the fill/natural soil interface, or just above the ground water interface. It is unclear as to what the purpose of these samples are for in relation to the description of soil borings in **Section 3.4.1**. Are these samples proposed for description, screening, geotechnical, or laboratory (chemical) analysis?

3. Regarding Standard Operating Procedure (SOP) # 5 (Monitoring Well Construction) in Appendix A, the PVC type is not specified for the installation of shallow and deep ground water monitoring wells. Typically, the standard PVC types for monitoring wells are either Schedule 40, and Schedule 80. It will also be important that, during installation of well casing, the pipe be centered in the borehole to ensure proper placement and even distribution of the filter pack, and annular seal. This will also allow straightness for sampling device access. Since hollow-stem augers are being used, this will likely not be a major issue. Also, Ohio EPA assumes that the annular seal cementing material will be emplaced using a tremie pipe. The use of tremie pipes and frequent checking of the depth of emplacement of cement grouts or clay during well construction are strongly encouraged.

4. Regarding SOP # 6 (Monitoring Well Development), the consultant should mention and specify that monitoring well development waters will be containerized in a similar manner as purge waters will be during sampling collection.

5. Since it is specified in the Field Sampling Plan (FSP) that a low flow (micropurge) ground water sampling technique will be employed, Ohio EPA does not support filtration for metals analysis. This is referenced in the document on page 6 of 10 (Table 2.6). The consultant has stated that a turbidity level of five (or less) NTU's will be a target for monitoring wells after well development. If that can be achieved, the low flow pumping rate (100 - 500 ml/min) should minimize disturbance of the water column and sample, such that in-situ ground water quality is best represented with respect to its entire mobile contaminant load. Should turbidity levels create a problem (> 5 NTU) and filtration become necessary, an in-line filtering technique

should be used to minimize aeration of the ground water. The sample should be filtered using a polycarbonate or cellular acetate filter. The filter should be pre-washed by running some of the sample through the in-line filter prior to sample collection.

QUALITY ASSURANCE PROJECT PLAN

1. Section 3.2.1 and Section 3.2.2 (pages 17 and 18 of 158). Please provide background language which establishes the basis for locating these sample locations and wells in these particular areas of the site. It would be beneficial to provide a map which indicates where the previous data points are located and, thus, help to establish the need for these sample locations.

2. Section 8.1.2 (page 56 of 158). Please provide more detail with regards to the soil samples being "Extracted/Preserved" with methanol. Will the sample containers come pre-preserved from the laboratory, or will the methanol be added on-site? It is recommended that the sample containers come pre-preserved from the laboratory. This will assist in eliminating the potential for inaccurate preservation in the field.

3. Section 20 (page 150 of 158). This page was missing from the document. Please add it or forward to the agencies.

Overall, this document was well written. The attention to Data Quality Objectives (DQO's) and the follow-up data assessment were thought out quite well.

Please contact me at (330) 963-1127, if there are any questions regarding the above comments.

Sincerely,

Lawrence Antonelli
Site Coordinator
Division of Emergency and Remedial Response

LA/kss

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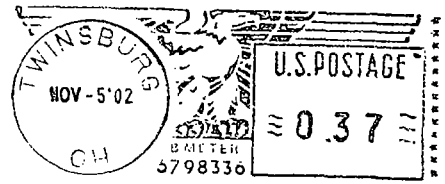

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